

Fiber Optic Network Enhancement

Project Goal **First Project**

WTD recognizes a need for a high-speed fiber network linking the three treatment facilities in order to reduce combined sewer overflow events.

Project Scope

My Approach:

Met with:

- ITS- fiber architect
- Charlie Dickey
- Phil Daniels
- Sales Engineers
- Sales Reps:
Verizon, AT&T
- B&C Engineers

KC's Options:

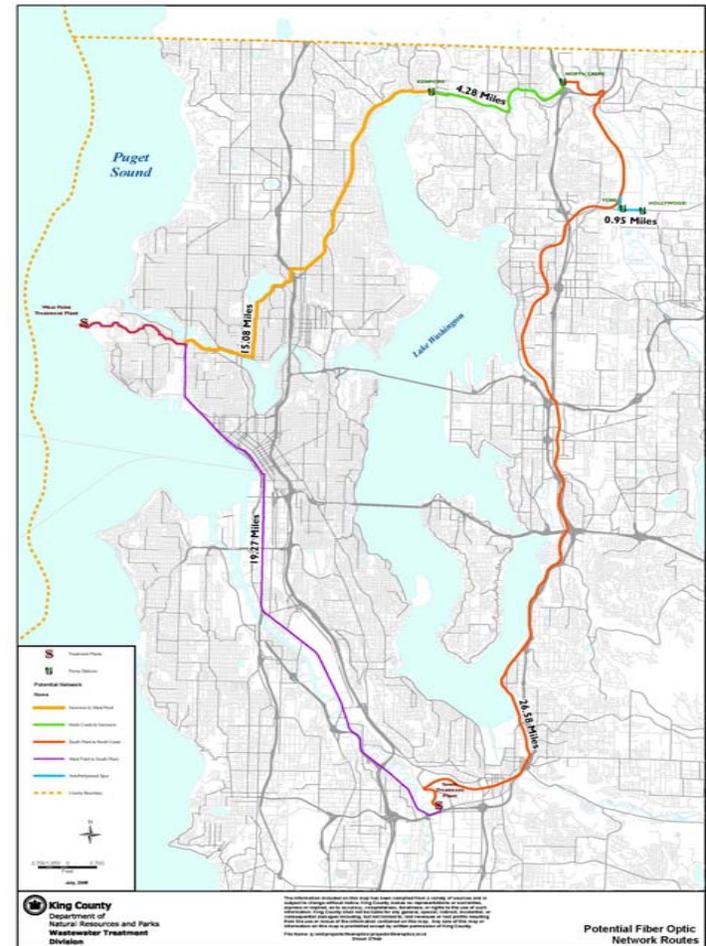
- Lease:
 - ITS
 - AT&T
 - Verizon
- Purchase & Construct:
 - Sumitomo Electric
 - Corning/Anixter
 - Krone/ADC

Final Report

Fiber Optic Network Enhancement

Two Step Plan:

1. Work with a fiber carrier to build the portion from Brightwater to South Plant along the Burlington Northern Santa Fe Railway using air-blown fiber.
2. Lease the east side routes from ITS until ownership is requested by WTD staff.
*County must connect Brightwater to the nearest INET hub in order to use ITS.

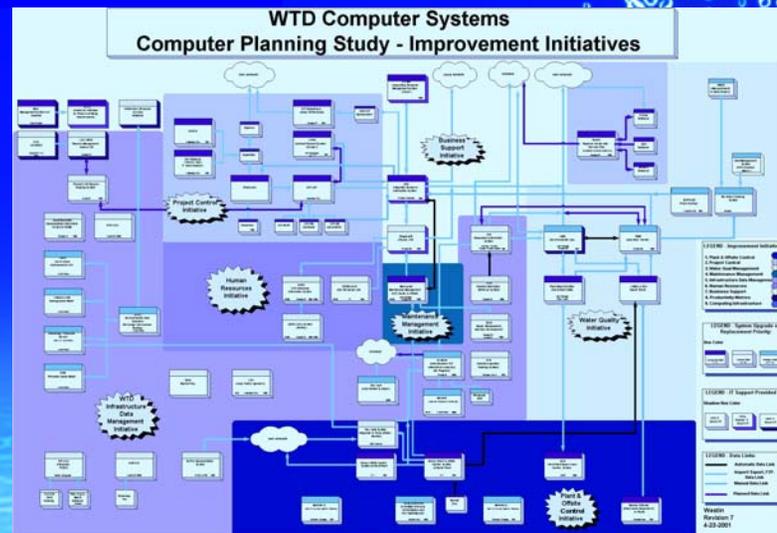


How do the databases

and systems communicate?

Where does the data flow?

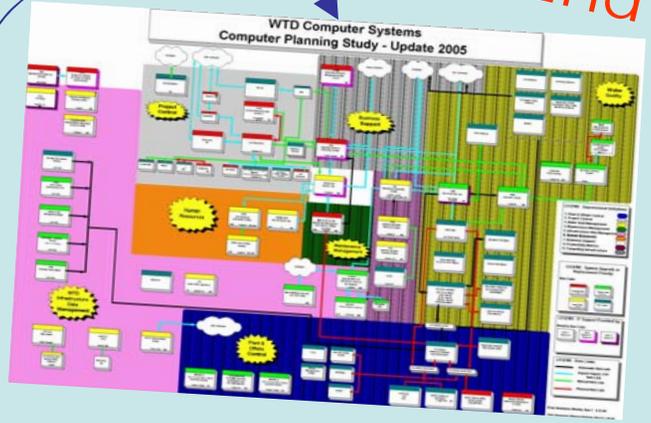
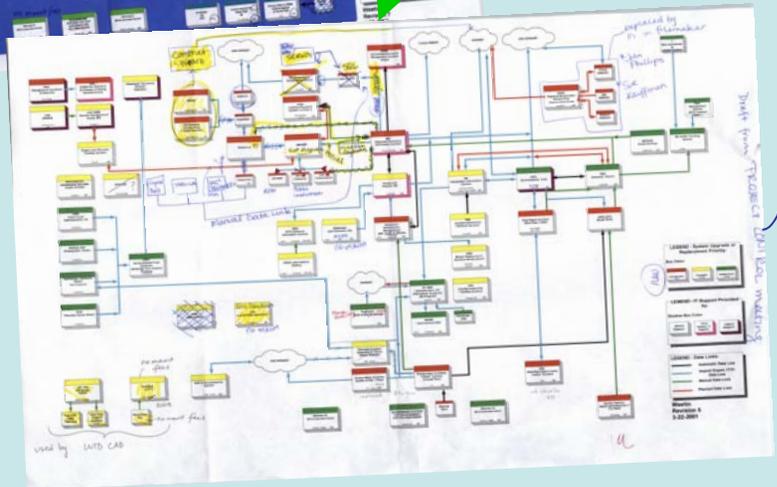
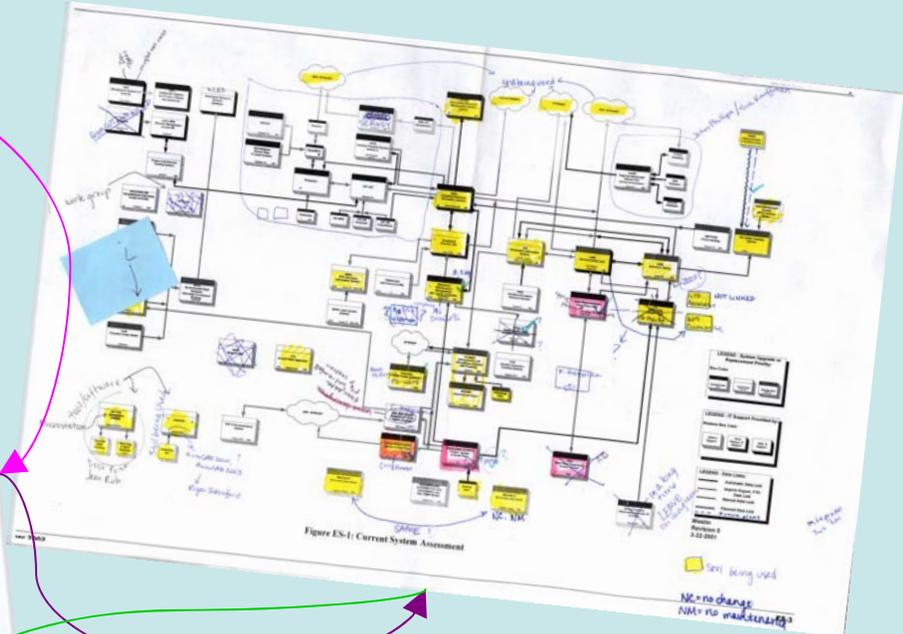
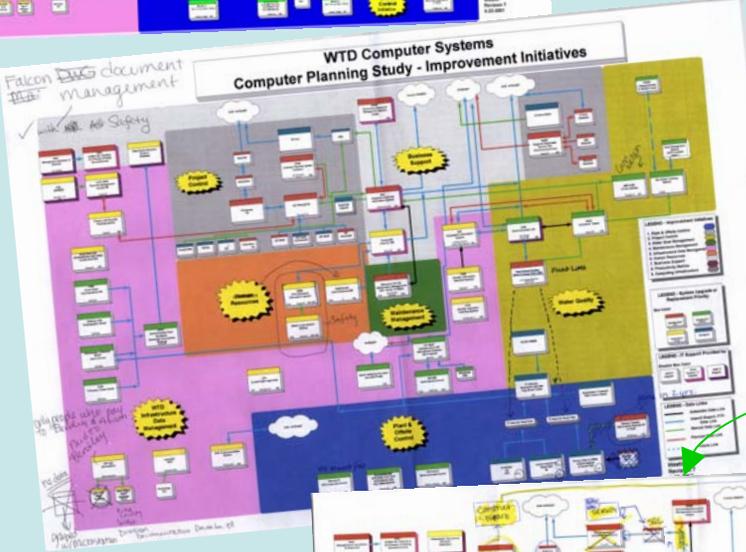
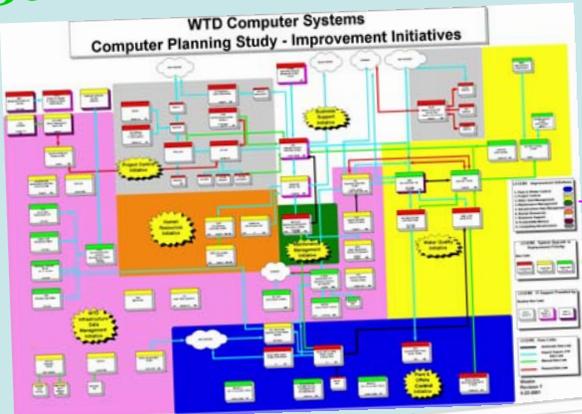
WTD IT System Update Second Project Update



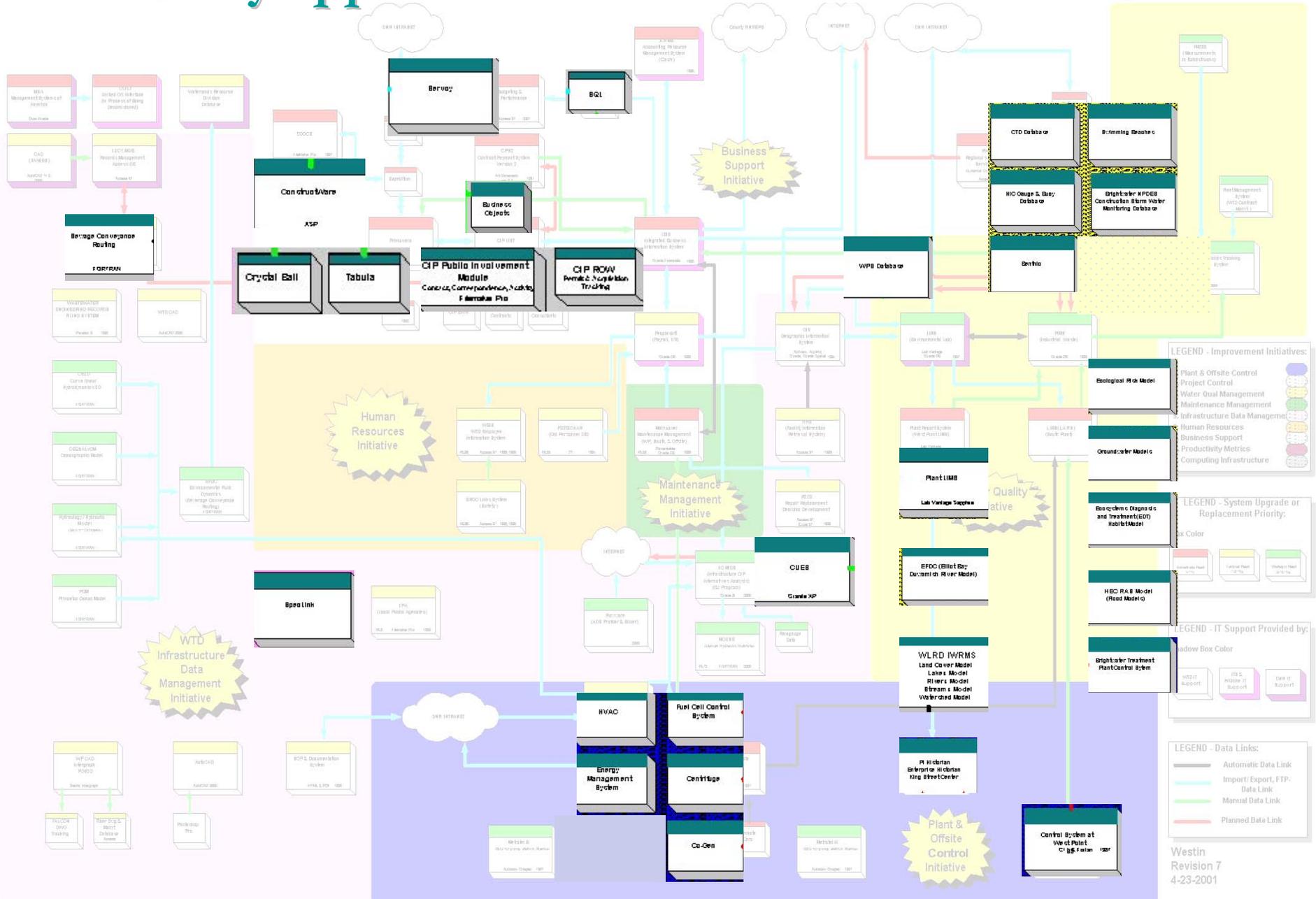
Start

THE PROCESS...

End



How many applications have been added since 2001?

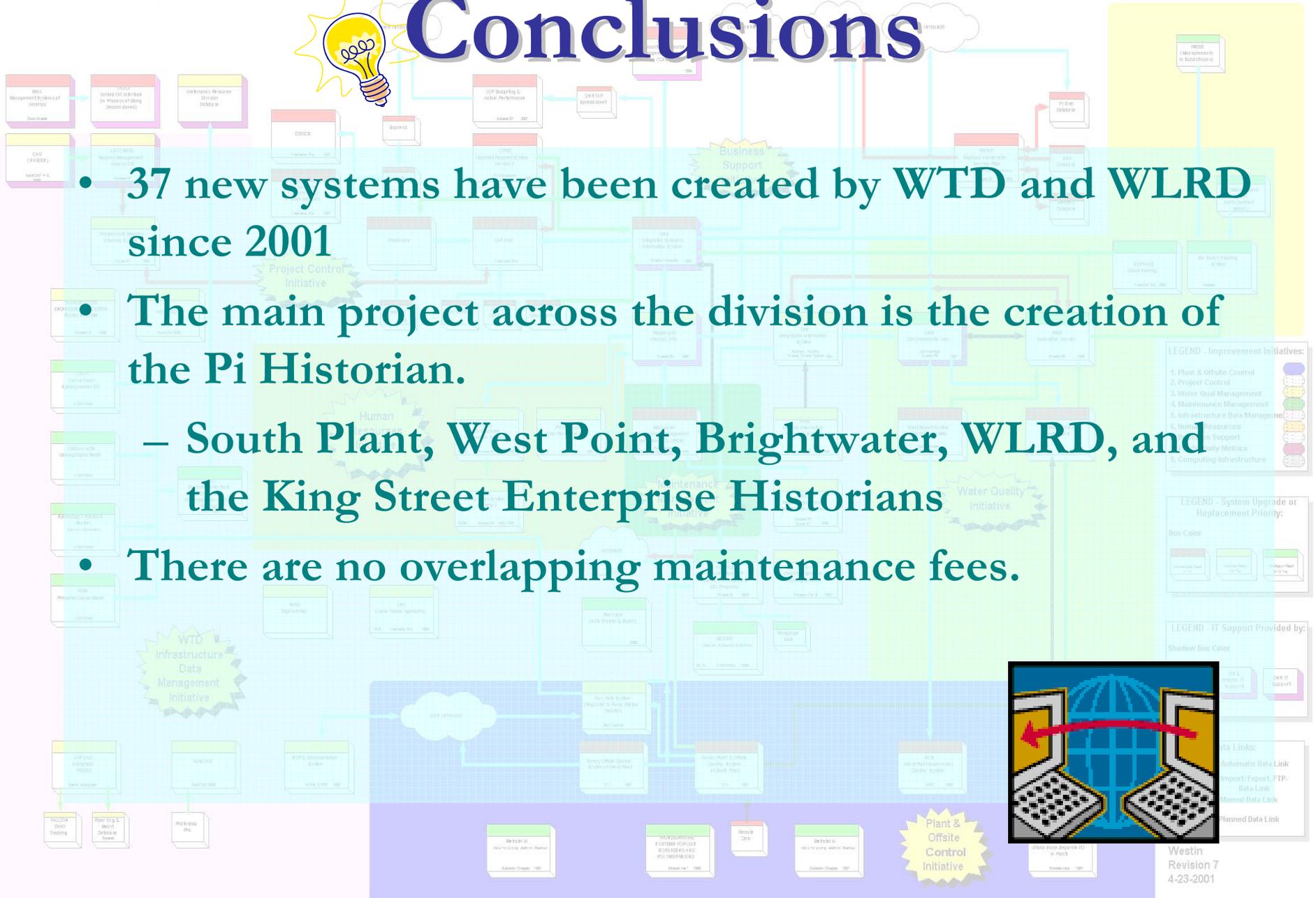


WTD Computer Systems Computer Planning Study - Improvement Initiatives



Conclusions

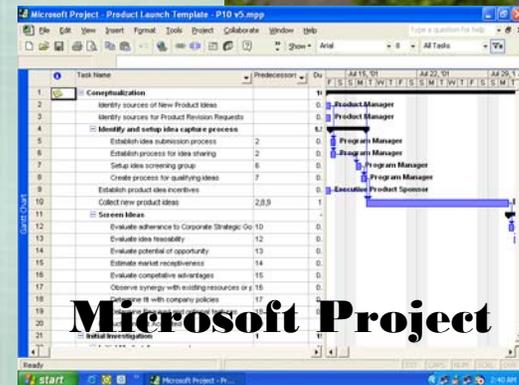
- 37 new systems have been created by WTD and WLRD since 2001
- The main project across the division is the creation of the Pi Historian.
 - South Plant, West Point, Brightwater, WLRD, and the King Street Enterprise Historians
- There are no overlapping maintenance fees.



Summer Field Trips



BROWN AND
CALDWELL



Exploring Career Options

Engineers

Environmental Planner

Project Managers

OEM Marketer

Computer Programmer

Localization Manager

Advertising Lead

Human Resources Manager

IP Licensor

Fiber Architects and **MANY MORE...**

*** In Conclusion, I am going to continue with my engineering studies!**



Sue Meyer



Roger Browne



Eric Davison



Challenges

LIMS,
FIRS,
R2D2?

- Educating myself on fiber so that I could effectively communicate with fiber architects, engineers, and sales reps.
- Learning about IT Systems that are specific to WTD in order to conduct the figure update.
 - This involved learning about what kind of data was being collected, why it was being collected, and many acronyms involved in the division.
- Interpreting pricing information and correctly analyzing.

What have I gotten out of this summer?

Well, besides my first project plan and two project binders...



- Confidence that I can educate myself about new technologies
- Knowledge and interest in fiber optics
- An excitement about various careers
- Appreciation for engineering & broad project management skills
- Better understanding of county government and business world
- New computer programs: Microsoft Project & Visio

Thanks WTD!

- Everyone who graciously offered information regarding their division's computer systems and their knowledge of the county's fiber.
- People I spoke with concerning their careers.
- GIS Analysts
- My friendly cubicle neighbors for the entertainment.
- Most of all, I want to thank my mentors. Ade, Rob, and Ann were there for every question, every meeting, continually checked in, and taught me a great deal about my projects.